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EXAMINER

CAO, PHUONG THAO

ART UNIT

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2164

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/623,168

Applicant(s)

HARTER, STEVEN V.

Examiner

Phuong-Thao Cao

Art Unit

2164

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 and 25-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 and 25-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S5108)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to Amendment filed on 12/03/2007.
2. Claims 1-3 and 6-12 have been amended. Currently, claims 1-23 and 25-27 are pending.

Response to Amendment

3. Amendment to claim 12 is effective to overcome the 112, 2nd paragraph rejection in the previous office action. Therefore, the previous 112, 2nd paragraph rejection has been withdrawn.

Response to Arguments

4. Applicant's arguments with respect to claims 1-23 and 25-27 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not

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described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The newly added subject matter "the property validator object being stored separate from the first and the second objects" is not disclosed in the specification. The specification does not defined how objects are stored separately from each other.

Claims 2-11 are rejected as incorporating the deficiencies of claim 11 upon which they depend.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "the property of the validator object" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-6, 11-14, 20-23 and 25-27 (effective filing date 07/19/2002) are rejected under 35 U.S.C. 102(e) as being anticipated by Stewart et al. (Publication No US 2003/0191731, effective filing date 04/04/2002).

As to claim 1, Stewart et al. teaches:

“A computer storage medium having instructions for validating data in a database system” (see Stewart et al., [0112] and [0119]), the instructions comprising:

“instantiating a property of first object as a second object” (Stewart et al. discloses Data as Property of an Object (see [0103]) and Data can be instantiated as Data Object (see [0097] and [0038]) wherein the Object is interpreted as the first object and the Data Object is interpreted as second object as claimed; also see [0038] and [0097] wherein the Data Object that holds the current value and the current state of the Property is equivalent to an object instantiation of the Property; also see [0045] wherein Subscriber is the first object and Data Object holding the current value of property (Billable) is the second object),

“wherein the second object includes a reference to a property validator object, the property validator object being stored separate from the first and second objects” (see Stewart et al., [0092] that Rules Object is used to validate Data (e.g., a property), so Rules Object can be reasonably interpreted as a property validator object; also see [0036] and [0044] for association between Business Rules and Data objects and the disclosure of including pointers (i.e., reference) to each other; and obviously, Rules Object is separate from the Object and the Data Object (see Fig. 4)); and

“applying a function referenced within the property validator object so as to ascertain if the property is validated” (see Stewart et al., [0019], [0045], [0062] and [0092] for using Rules Object to validate Data wherein an object must perform its service through methods (functions); also see [0015] for an example of function of comparing values based on maximum length Rule implemented by a specialized Rule object).

As to claim 2, this claim is rejected based on arguments given above for rejected claim 1 and is similar rejected including the following:

Stewart et al. teaches:

“wherein a function referenced within the property validator object comprises a function of an existing value of the property of the first object, and wherein applying the function also comprises comparing a received value to the existing value” (see Stewart et al., [0019], [0045], [0062] and [0092] for using Rules Object to validate Data wherein an object must perform its service through methods (functions); also see [0015] for an example of function of comparing values based on maximum length Rule implemented by a specialized Rule object; also see

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[0036] for different types of Rule Objects which implement different functions based on Rules as disclosed).

As to claim 3, this claim is rejected based on arguments given above for rejected claim 1 and is similar rejected including the following:

Stewart et al. teaches:

“wherein the function referenced within the property of the validator object comprises a function of status of a second property of the first object, and wherein applying the function also comprises examining the status of the second property of the first object” (see Stewart et al., [0058] and [0117]).

As to claim 4, this claim is rejected based on arguments given above for rejected claim 3 and is similar rejected including the following:

Stewart et al. teaches:

“wherein the status of the second property comprises whether its value can be changed” (see Stewart et al., [0058] and [0097] wherein the status of “read-only” is equivalent to the status of the second property as illustrated in Applicant’s claim language).

As to claim 5, this claim is rejected based on arguments given above for rejected claim 4 and is similar rejected including the following:

Stewart et al. teaches:

“wherein the status of the second property comprises whether its value is valid” (see Stewart et al., [0038] and [0097] for the state of valid/invalid).

As to claim 6, this claim is rejected based on arguments given above for rejected claim 1 and is similar rejected including the following:

Stewart et al. teaches:

“setting the value of the property of the first object if a constraint associated with the function referenced within the property validator object is met” (see Stewart et al., [0062] and [0092] wherein committing these changes to Data to the Database is equivalent to setting the value of the property as illustrated in Applicant’s claim language).

As to claim 11, this claim is rejected based on arguments given above for rejected claim 1 and is similar rejected including the following:

Stewart et al. teaches:

“obtaining a current value of the property of the first object” (see Stewart et al., [0039] wherein a Rule Object must obtain the current value of a Property in order to know it as disclosed; also see [0059]).

As to claim 12, Stewart et al. teaches:

“A computer storage medium having instructions comprising a framework for validating data in a database system” (see Stewart et al., Abstract, Fig. 2 and [0119]), the instructions comprising:

“identifying at least one property of entity to be validated” (see Stewart et al., [0046] wherein the disclosure of setting a property to be billable for a validation is equivalent to Applicant’s claim language);

“identifying constraint information to be used for ascertaining if said at least one property is valid” (see Stewart et al., [0045], [0047] and [0057] wherein Rules and conditions is equivalent to Applicant’s “constraint information”);

“forming an object of said at least one property” (see Stewart et al., [0038], [0039], [0059], [0097] and [0106]).

“wherein identifying constraint information comprises referencing a reference stored within the object, the reference being indicative of constraint information which is stored outside of the object itself, and wherein the constraint information is referenced within a property validator object that is separate from both the object and also separate from the entity to be validated” (see Stewart et al., [0092] that Rules Object is used to validate Data (e.g., a property), so Rules Object can be reasonably interpreted as a property validator object; also see [0036] and [0044] for association between Rules and Data objects and the disclosure of including pointers (i.e., reference) to each other; and obviously, Rules Object is separate from the Object (entity) and the Data Object (see Fig. 4)).

As to claim 13, this claim is rejected based on arguments given above for rejected claim 12 and is similar rejected including the following:

Stewart et al. teaches:

“identifying a validator of a function of a type of said at least one property, the validator being a class of validators” (see Stewart et al., [0036] and [0037] wherein each specialized Rule Object is equivalent to Applicant’s “validator”).

As to claim 14, this claim is rejected based on arguments given above for rejected claim 12 and is similar rejected including the following:

Stewart et al. teaches:

“identifying events to be issued during validation” (see Stewart et al., [0039] wherein returning error to the caller is an event; also see [0037] for trigger/notification).

As to claim 20, this claim is rejected based on arguments given above for rejected claim 12 and is similar rejected including the following:

Stewart et al. teaches:

“wherein identifying constraint information comprises identifying valid criteria for a value of the property” (see Stewart et al., [0037] wherein allowed values list is equivalent to valid criteria as illustrated in Applicant’s claim language).

As to claim 21, this claim is rejected based on arguments given above for rejected claim 12 and is similar rejected including the following:

Stewart et al. teaches:

“wherein identifying constraint information comprises identifying criteria of when a value of the property can be changed” (see Stewart et al., [0047] and [0058]).

As to claim 22, this claim is rejected based on arguments given above for rejected claim 21 and is similar rejected including the following:

Stewart et al. teaches:

“wherein the criteria identifies that the value can be changed anytime upon execution of the instruction” (see Stewart et al., [0057], [0058] and [0062] for updates and revisions to the Data).

As to claim 23, this claim is rejected based on arguments given above for rejected claim 21 and is similar rejected including the following:

Stewart et al. teaches:

“wherein the criteria identifies that the value can be changed as a function of creation of a corresponding entity” (see Stewart et al., [0058] wherein value of Currency, Period and Terms is updated or changed when there is any change in Billable status wherein each Billable status can be considered a corresponding entity).

As to claim 25, this claim is rejected based on arguments given above for rejected claim 21 and is similar rejected including the following:

Stewart et al. teaches:

“wherein the criteria identifies that the value can be changed as a function of a status value of another property” (see Stewart et al., [0058] for the trigger Rule which is equivalent to criteria as illustrated in Applicant’s claim language).

As to claim 26, this claim is rejected based on arguments given above for rejected claim 25 and is similar rejected including the following:

Stewart et al. teaches:

“wherein the status value comprises whether said another property is changeable” (see Stewart et al., [0038] wherein read-only is the status indicating whether the value of the property is changeable as illustrated in Applicant’s claim language).

As to claim 27, this claim is rejected based on arguments given above for rejected claim 26 and is similar rejected including the following:

Stewart et al. teaches:

“wherein the status value comprises whether said another property is valid” (see Stewart et al., [0038] wherein valid/invalid is the status indicating where the value of the property is valid as illustrated in Applicant’s claim language).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 7-10 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart et al. (Publication No US 2003/0191731), and further in view of Deffler et al. (US Patent No 6,859,919).

As to claim 7, Stewart et al. teaches all limitations as recited in claim 6. However, Stewart et al. does not teach “issuing an event indicating the property of the first object is valid”.

On the other hand, Deffler et al. teaches “issuing an event indicating the property of the first object is valid” (see Deffler et al., [column 6, lines 13-25] wherein the disclosure of providing an indication that the action was successful implies that the property is valid as illustrated in Applicant’s claim language).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teaching of Deffler et al. into the Stewart et al.’s system. A skilled artisan would have been motivated to do so to provide an effective and interactive way to communicate occurrences in the validation process and prompt for appropriate action or response. A system with a feature of notification (i.e., issuing event) is more effective.

As to claim 8, Stewart et al. teaches all limitations as recited in claim 1.

However, Stewart et al. does not teach “issuing an exception if a constraint associated with the function referenced within the property validator object is not met”.

On the other hand, Deffler et al. teaches “issuing an exception if a constraint associated with the function referenced within the property validator object is not met” (see Deffler et al., [column 6, lines 13-25] wherein “any one of set of semantics” is equivalent to Applicant’s

“constraint information” and “indication that the action is failed” is equivalent to Applicant’s “issuing an exception”).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teaching of Deffler et al. into the Stewart et al.’s system. A skilled artisan would have been motivated to do so to provide an effective and interactive way to communicate occurrences in the validation process and prompt for appropriate action or response. A system with a feature of notification (i.e., issuing event) is more effective.

As to claim 9, Stewart et al. teaches all limitations as recited in claim 1.

However, Stewart et al. does not teach “issuing an event indicating the value of the property of the first object is changing”.

On the other hand, Deffler et al. teaches “issuing an event indicating the value of the property of the first object is changing” (see Deffler et al., [column 5, lines 43-67] and Table One for event “PreEdit” which is equivalent to Applicant’s claim language).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teaching of Deffler et al. into the Stewart et al.’s system. A skilled artisan would have been motivated to do so to provide an effective and interactive way to communicate occurrences in the validation process and prompt for appropriate action or response. A system with a feature of notification (i.e., issuing event) is more effective.

As to claim 10, Stewart et al. teaches all limitations as recited in claim 1.

However, Stewart et al. does not teach “issuing an event indicating whether the value of the property of the first object is changeable”.

On the other hand, Deffler et al. teaches “issuing an event indicating whether the value of the property of the first object is changeable” (see Deffler et al., [column 5, lines 43-67] and Table One for event “PreEdit” which is equivalent to Applicant’s claim language).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teaching of Deffler et al. into the Stewart et al.’s system. A skilled artisan would have been motivated to do so to provide an effective and interactive way to communicate occurrences in the validation process and prompt for appropriate action or response. A system with a feature of notification (i.e., issuing event) is more effective.

As to claim 15, Stewart et al. teaches all limitations as recited in claim 14.

However, Stewart et al. does not teach “wherein the event to be issued comprises a notification that a value of the property is changing”.

On the other hand, Deffler et al. teaches “wherein the event to be issued comprises a notification that a value of the property is changing” (see Deffler et al., [column 5, lines 43-67] and Table One for event “PreEdit” which is equivalent to Applicant’s claim language; also Stewart et al., [0037] for trigger/notification).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teaching of Deffler et al. into the Stewart et al.’s system. A skilled artisan would have been motivated to do so to provide an effective and interactive way

to communicate occurrences in the validation process and prompt for appropriate action or response. A system with a feature of notification (i.e., issuing event) is more effective.

As to claim 16, Stewart et al. teaches all limitations as recited in claim 14.

Stewart et al. does not teach “wherein the event to be issued comprises a notification that a value of the property has changed”.

Deffler et al. teaches “wherein the event to be issued comprises a notification that a value of the property has changed” (see Deffler et al., [column 5, lines 43-67] and Table One for event “PostEdit” which is equivalent to Applicant’s claim language; also Stewart et al., [0037] for trigger/notification).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teaching of Deffler et al. into the Stewart et al.’s system. A skilled artisan would have been motivated to do so to provide an effective and interactive way to communicate occurrences in the validation process and prompt for appropriate action or response. A system with a feature of notification (i.e., issuing event) is more effective.

As to claim 17, Stewart et al. teaches all limitations as recited in claim 14.

However, Stewart et al. does not teach “wherein the event to be issued comprises a status of the property is changed”.

On the other hand, Deffler et al. teaches “wherein the event to be issued comprises a status of the property is changed” (see Deffler et al., [column 5, lines 43-67], [column 9, lines 30-38] and Table One wherein event “PreNull” is equivalent to event to be issued comprises a

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status of the property has changed as illustrated in Applicant's claim language since status of the property would be changed from existing to non-existing as considered by the system when a property is destroyed).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teaching of Deffler et al. into the Stewart et al.'s system. A skilled artisan would have been motivated to do so to provide an effective and interactive way to communicate occurrences in the validation process and prompt for appropriate action or response. A system with a feature of notification (i.e., issuing event) is more effective.

As to claim 18, this claim is rejected based on arguments given above for rejected claim 17 and is similar rejected including the following:

Stewart et al. and Deffler et al. teach:

"wherein the status comprises whether the value of the property is changeable" (see Stewart et al., [0038] for the state of read-only which indicates whether the value of the property is changeable as illustrated in Applicant's claim language).

As to claim 19, this claim is rejected based on arguments given above for rejected claim 18 and is similar rejected including the following:

Stewart et al. and Deffler et al. teach:

"wherein the status comprises whether the value of the property is valid" (see Stewart et al., [0038] for the state of valid/invalid which indicates whether the value of the property is valid as illustrated in Applicant's claim language).

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Phuong-Thao Cao** whose telephone number is (571)272-2735. The examiner can normally be reached on 8:30 AM - 5:00 PM (Mon - Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phuong-Thao Cao

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March 5, 2008

/Charles Rones/

Supervisory Patent Examiner, Art Unit 2164